AMENDMENT

Listing of Claims:

The following listing of claims replaces all previous listings or version thereof:

1. – 3. (Cancelled)

4. (Currently Amended) The transduced cell ~~vector~~ of claim 29~~1~~, wherein the recombinant lentivirus is further defined as incapable of reconstituting a wild-type lentivirus through recombination.

5. (Currently Amended) The transduced cell ~~vector~~ of claim 4, wherein the recombinant lentivirus~~vector~~ does not express a functional lentiviral gene ~~other than the *gag*, *pol* and *rev* genes~~.

6. (Currently Amended) The transduced cell ~~vector~~ of claim 29~~1~~, wherein the promoter is capable of promoting expression of the transgene at a signal-to-noise ratio of between about 10 and about 200.

7. (Currently Amended) The transduced cell ~~vector~~ of claim 6, wherein the promoter is capable of promoting expression of the transgene at a signal-to-noise ratio of between about 40 and about 200.

8. (Currently Amended) The transduced cell ~~vector~~ of claim 7, wherein the promoter is capable of promoting expression of the transgene at a signal-to-noise ratio of between about 150 and about 200.

9. (Currently Amended) The transduced cell ~~vector~~ of claim 6, wherein the promoter is an EF1-α promoter, a PGK promoter, a gp91phox promoter, a MHC classII promoter, a clotting Factor IX promoter, a clotting Factor V111 promoter, an insulin promoter, a PDX1 promoter, a CD11 promoter, a CD4 promoter, a CD2 promoter or a gp47 promoter.

10. (Currently Amended) The transduced cell ~~vector~~ of claim 9, wherein the transgene is positioned under the control of the EF1-α promoter.

11. (Withdrawn) The vector of claim 9, wherein the transgene is positioned under the control of the PGK promoter.

12. (Currently Amended) The transduced cell ~~vector~~ of claim 29~~1~~, wherein the transgene is erythropoietin, an interleukin, a colony-stimulating factor, integrin αIIbβ, a multidrug resistance gene, gp91phox, gp 47, an antiviral gene, a gene coding for blood coagulation factor VIII, a gene coding for blood coagulation factor IX, a T cell antigen receptor, a B cell antigen receptor, a single chain antibodies (ScFv), TNF, gamma interferon, CTLA4, B7, Melana, MAGE.

13. (Currently Amended) The transduced cell ~~vector~~ of claim 12, wherein the transgene is gp91phox.

14. (Currently Amended) The transduced cell ~~vector~~ of claim 12, wherein the transgene is gp 47.

15. (Currently Amended) The transduced cell ~~vector~~ of claim 12, wherein the transgene is Interleukin-2.

16. (Currently Amended) The transduced cell ~~vector~~ of claim 12, wherein the transgene is Interleukin-12.

17. (Currently Amended) The transduced cell ~~vector~~ of claim 12, wherein the transgene is a gene coding for blood coagulation factor VIII.

18. (Currently Amended) The transduced cell ~~vector~~ of claim 12, wherein the transgene is a gene coding for blood coagulation factor IX.

19. (Currently Amended) The transduced cell ~~vector~~ of claim 1, further comprising a posttranscriptional regulatory sequence positioned to promote the expression of the transgene.

20. (Withdrawn) The vector of claim 19, wherein the posttranscriptional regulatory sequence is an intron positioned within the expression cassette.

21. (Withdrawn) The vector of claim 20, wherein the intron is positioned in an orientation opposite the vector genomic transcript.

22. (Currently Amended) The transduced cell ~~vector~~ of claim 19, wherein the posttranscriptional regulatory sequence is a posttranscriptional regulatory element.

23. (Currently Amended) The transduced cell ~~vector~~ of claim 22, wherein the posttranscriptional regulatory element is woodchuck hepatitis virus posttranscriptional regulatory element (WPRE).

24. (Withdrawn) The vector of claim 23, wherein the posttranscriptional regulatory element is hepatitis B virus posttranscriptional regulatory element (HPRE).

25. (Currently Amended) The transduced cell ~~vector~~ of claim 1, wherein the LTR region has been rendered substantially transcriptionally inactive by virtue of deletions in the U3 region of the 3' LTR.

26.-28. (Cancelled)

29. (Currently Amended) ~~The host cell of claim 28, wherein the cell is a~~ A human hematopoietic ~~progenitor~~ cell transduced with a self-inactivating recombinant lentivirus, the lentivirus comprising an expression cassette comprising a transgene positioned under the control of a promoter that is active to promote detectable transcription of the transgene in a human hematopoietic progenitor cell or a differentiated hematopoietic cell; and an LTR region that has reduced promoter activity relative to wild-type LTR.

30. (Currently Amended) The transduced host cell of claim 29, wherein the human hematopoietic cell is a human hematopoietic progenitor cell ~~is a CD34$^+$ cell~~.

31. (Currently Amended) The transduced host cell of claim 30, wherein the human hematopoietic progenitor cell is a $CD34^+$ cell. ~~A self-inactivating recombinant vector comprising:~~

~~(a) HIV-1 *gag*, *pol* and *rev* genes;~~

~~(b) an expression cassette comprising a transgene positioned under the control of an EF1-a promoter that is active to promote detectable transcription of the transgene in a human hematopoietic progenitor cell at a signal-to-noise ratio of between about 150 and about 200; and~~

~~(c) an LTR region that has been rendered substantially transcriptionally inactive by virtue of deletions in the U3 region of the 3' LTR~~.

32. (Currently Amended) A method for transducing a human hematopoietic stem cell comprising contacting a population of human cells that include hematopoietic stem cells *in vitro* with a lentiviral vector ~~in accordance with claim 1~~ under conditions to effect the transduction of a human hematopoietic progenitor cell in said population by said vector, wherein the lentiviral vector is defined as a self-inactivating recombinant vector comprising:

(a) an expression cassette comprising a transgene positioned under the control of a promoter that is active to promote detectable transcription of the transgene in a human hematopoietic progenitor cell; and

(b) an LTR region that has reduced promoter activity relative to wild-type LTR.

33. (Original) The method of claim 32, wherein the human hematopoietic stem cell population comprises $CD34^+$ cells.

34. (Original) The method of claim 32, wherein the cell population is treated to stimulate cell proliferation without substantial loss of stem cell pluripotency.

35. – 37. (Cancelled)

38. (New) The method of claim 32, wherein the transduced stem cell is incubated in a differentiation media.

39. (New) The method of claim 38, wherein incubated transduced stem cell is differentiated into an erythroid cell, a granulocyte, a monocyte or a dendritic cell.

40. (New) The hematopoietic cell of claim 29, further defined as a dendritic cell.

41. (New) The hematopoietic cell of claim 29, further defined as a granulocyte.

42. (New) The hematopoietic cell of claim 29, further defined as an erythroid cell.

43. (New) The hematopoieitc cell of claim 29, further defined as a monocyte.

44. (New) The hematopoietic cell of claim 29, further defined as a B cell.

45. (New) The hematopoietic cell of claim 29, further defined as a T lymphocyte.